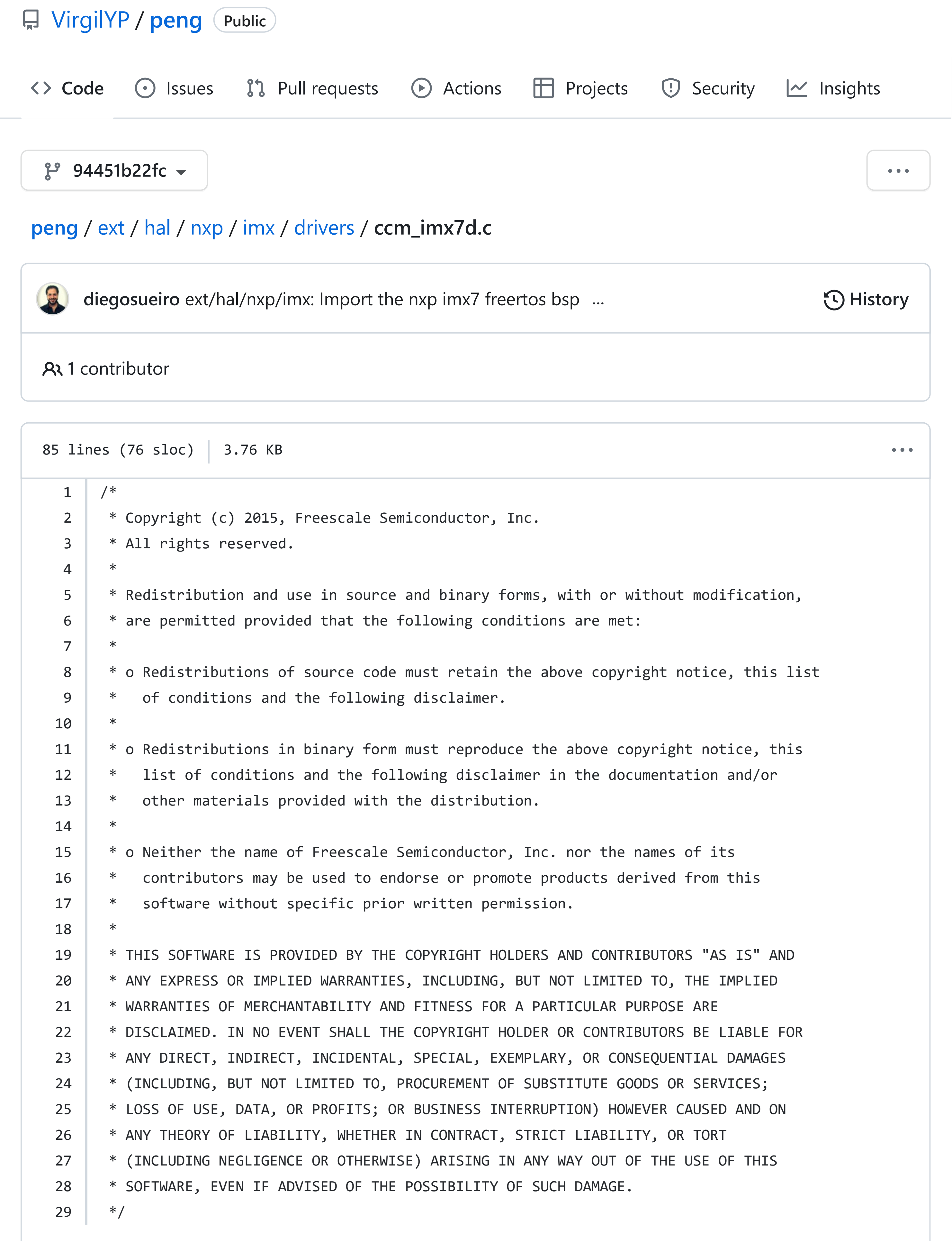
EXHIBIT B19



peng / ext / hal / nxp / imx / drivers / ccm_imx7d.c

diegosueiro ext/hal/nxp/imx: Import the nxp imx7 freertos bsp …

1 contributor

85 lines (76 sloc) | 3.76 KB

```
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 */
```
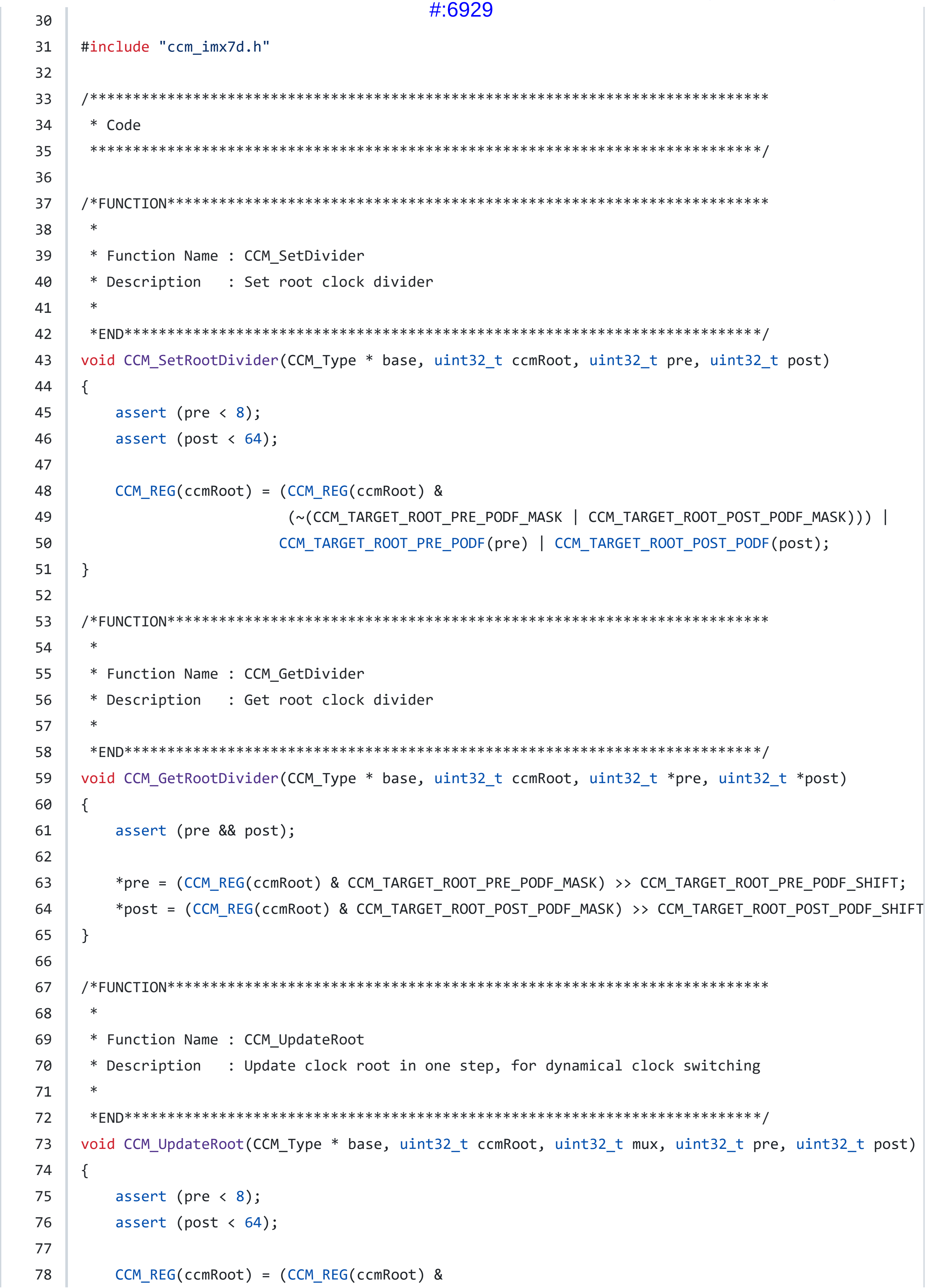
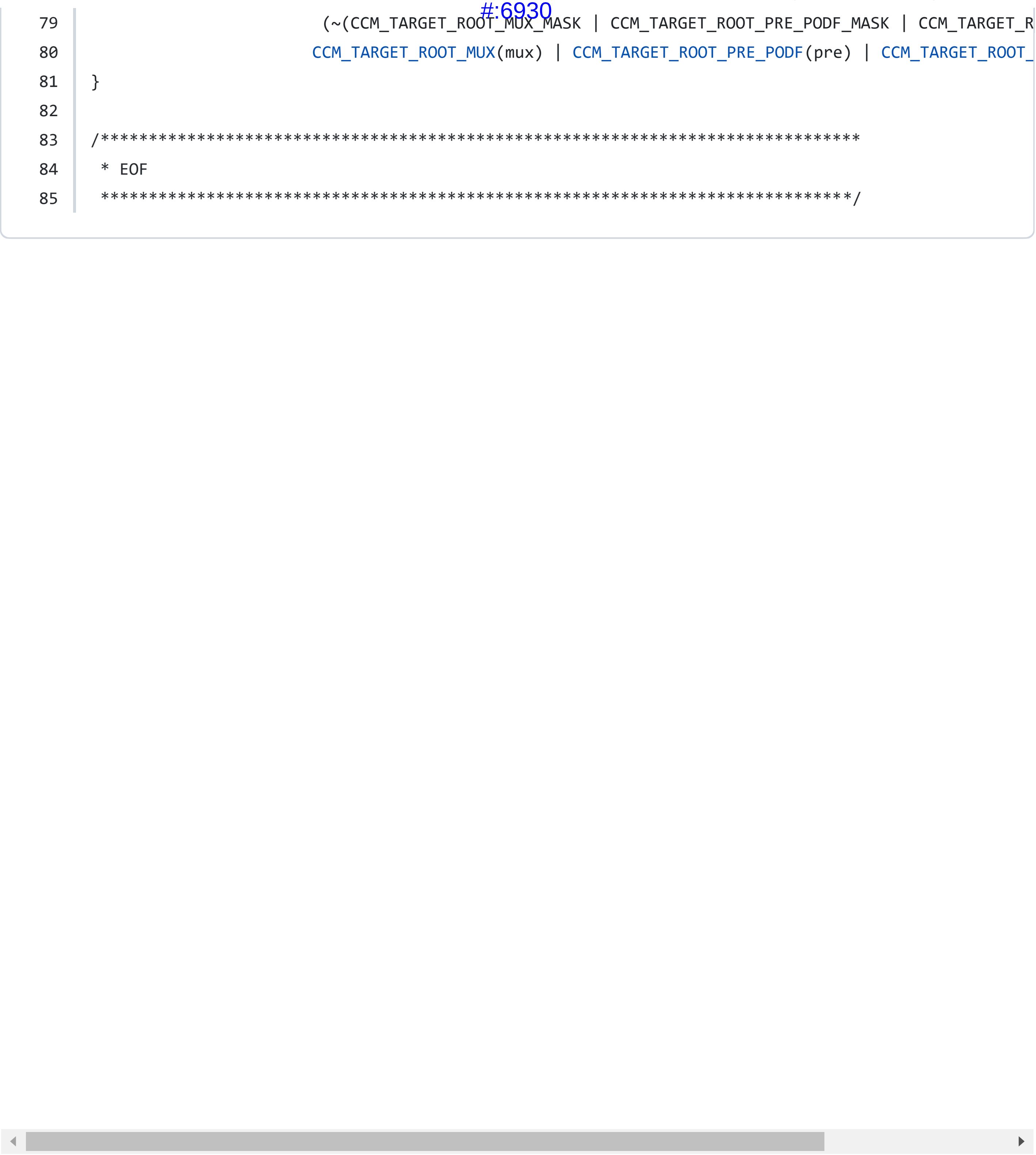



```

#include "ccm_imx7d.h"

/*******************************************************************************
 * Code
 ******************************************************************************/

/*FUNCTION**********************************************************************
 *
 * Function Name : CCM_SetDivider
 * Description   : Set root clock divider
 *
 *END**************************************************************************/
void CCM_SetRootDivider(CCM_Type * base, uint32_t ccmRoot, uint32_t pre, uint32_t post)
{
    assert (pre < 8);
    assert (post < 64);

    CCM_REG(ccmRoot) = (CCM_REG(ccmRoot) &
                        (~(CCM_TARGET_ROOT_PRE_PODF_MASK | CCM_TARGET_ROOT_POST_PODF_MASK))) |
                       CCM_TARGET_ROOT_PRE_PODF(pre) | CCM_TARGET_ROOT_POST_PODF(post);
}

/*FUNCTION**********************************************************************
 *
 * Function Name : CCM_GetDivider
 * Description   : Get root clock divider
 *
 *END**************************************************************************/
void CCM_GetRootDivider(CCM_Type * base, uint32_t ccmRoot, uint32_t *pre, uint32_t *post)
{
    assert (pre && post);

    *pre = (CCM_REG(ccmRoot) & CCM_TARGET_ROOT_PRE_PODF_MASK) >> CCM_TARGET_ROOT_PRE_PODF_SHIFT;
    *post = (CCM_REG(ccmRoot) & CCM_TARGET_ROOT_POST_PODF_MASK) >> CCM_TARGET_ROOT_POST_PODF_SHIFT
}

/*FUNCTION**********************************************************************
 *
 * Function Name : CCM_UpdateRoot
 * Description   : Update clock root in one step, for dynamical clock switching
 *
 *END**************************************************************************/
void CCM_UpdateRoot(CCM_Type * base, uint32_t ccmRoot, uint32_t mux, uint32_t pre, uint32_t post)
{
    assert (pre < 8);
    assert (post < 64);

    CCM_REG(ccmRoot) = (CCM_REG(ccmRoot) &
```



```
                        (~(CCM_TARGET_ROOT_MUX_MASK | CCM_TARGET_ROOT_PRE_PODF_MASK | CCM_TARGET_R
                       CCM_TARGET_ROOT_MUX(mux) | CCM_TARGET_ROOT_PRE_PODF(pre) | CCM_TARGET_ROOT_
}

/******************************************************************************
 * EOF
 *****************************************************************************/
```